



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/701,068 | 11/05/2003 | Craig Cless | 6666.140 | 6311 |

7590 12/17/2004

Joseph W. Berenato, III
Liniak, Berenato & White, LLC
Suite 240
6550 Rock Spring Drive
Bethesda, MD 20817

EXAMINER

ZIMMERMAN, JOHN J

ART UNIT PAPER NUMBER

1775

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,068

Applicant(s)

CLESS ET AL.

Examiner

John J. Zimmerman

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

FIRST OFFICE ACTION

Drawings

1. Figures 11, 12, 13A and 13B should be designated by a legend such as --Prior Art-- because only that which is prior art is illustrated (see description of these figures in paragraphs [0004], [0005], [0027]-[0030]). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheets should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1775

3. Claims 1 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Wohrl (U.S. Patent 4,735,260).

4. Wohrl discloses a laminate comprising a metal foil and a metallic felt layer joined to the metal foil by brazing, crimping or clamping and having an exposed surface (e.g. see Figure 6; column 4, lines 51-53; column 5, lines 14-17).

5. Claims 1-2, 6-9, 16, 19, 40-44, 48 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemont (U.S. Patent 3,948,295).

6. Lemont discloses a multi-layer tubing laminate comprising a metal foil and a metallic felt layer joined to the metal foil by fasteners or welding and having an exposed surface (e.g. see Figures 1-19; column 4, lines 10-25; column 13, lines 22-38).

7. Claims 1-2 and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Albertson (U.S. Patent 3,390,750).

8. Albertson discloses a laminate comprising a metal foil and a metallic felt layer joined to the metal foil by welding, sintering, brazing or adhesives and having an exposed surface (e.g. see Figures 1-3; column 2, lines 8-21 and 45-55).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wohrl (U.S. Patent 4,735,260) in view of Boss (U.S. Patent 6,465,110).

11. Wohrl discloses a laminate comprising a metal foil and a metallic felt layer joined to the metal foil by brazing, crimping or clamping and having an exposed surface (e.g. see Figure 6; column 4, lines 51-53; column 5, lines 14-17). Wohrl may differ from the claims in that Wohrl may not disclose the same composition, basis weight, mean fiber width and same methods to attach the metallic felt layer to the foil. Boss, however, shows that all these compositions, felt and fiber parameters and methods of attachment are known specifications for insulating metal felts (e.g. see column 2, lines 43-67; column 3, lines 1-33). It would have been obvious to one of ordinary skill in the art to use Boss's disclosed compositions, felt and fiber parameters and methods of attachment for the metal felt of Wohrl because Boss discloses that felts meeting these specifications are particularly good felts for insulating purposes.

Art Unit: 1775

12. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemont (U.S. Patent 3,948,295) in view of Boss (U.S. Patent 6,465,110) and further in view of Nelson (U.S. Patent 5,020,481).

13. Lemont discloses a multi-layer laminate comprising a metal foil and a metallic felt layer joined to the metal foil by fasteners or welding and having an exposed surface (e.g. see Figures 1-19; column 4, lines 10-25; column 13, lines 22-38). Lemont proposes using the laminate as multiple layers in tubular structures (e.g. see Figure 11) and also shows that joints may be overlapped without touching of the metal foils (e.g. see Figure 19). Lemont may differ from the claims in that Lemont may not disclose the same composition, basis weight, mean fiber width and same methods to attach the metallic felt layer to the foil. Boss, however, shows that all these compositions, felt and fiber parameters and methods of attachment are known specifications for insulating metal felts (e.g. see column 2, lines 43-67; column 3, lines 1-33). It would have been obvious to one of ordinary skill in the art to use Boss's disclosed compositions, felt and fiber parameters and methods of attachment for the metal felt of Lemont because Boss discloses that felts meeting these specifications are particularly good felts for insulating purposes. Lemont may not disclose much detail as to how to apply his multi-layer laminate to structures, but Nelson clearly shows that it is conventional in the insulator art to wrap thermal insulation jackets around pipes and that coupling connections can be made without heat transfer paths (e.g. see Figures 8-10). In view of Nelson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to wrap the thermal insulation of Lemont around any type of

Art Unit: 1775

hot piping (e.g. exhaust pipes) with coupling connections because Nelson clearly shows that this is a conventional method of applying thermal insulation to structures in the art.


Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additionally cited references serve to further establish the level of ordinary skill in the art at the time the invention was made. Lee (U.S. Patent 4,399,840) and Nakajima (U.S. Patent 6,166,326) are cited to show typical joint configurations used in the art to seal wrappings. Kordyban (U.S. Patent 3,224,622) is cited to show how overlapping of joint areas is used to insure proper insulation.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1775

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Zimmerman
Primary Examiner
Art Unit 1775

jjz
December 13, 2004